REMARKS

Rejections Under 35 USC §112, 1st Paragraph

Claims 18 and 22 are rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. The rejection is respectfully traversed.

Claim 18 has been amended to recite a method of producing activated T cells stimulated by dendritic cells which are activated by exposure to a hepsin fragment having the sequence of SEQ ID NO. 28 or 148. The present specification has clearly demonstrated the induction of hepsin-specific cytotoxic T cells by dendritic cells activated by hepsin peptide SEQ ID NO. 28 or 148 (Example 17 and Figures 20-21). Hence, Applicant submits that the scope of amended claim 18 is commensurate with the scope of enablement provided in the specification.

The Examiner contends that claim 18 embraces an entire hepsin protein and a single amino acid. Applicant submits that the amended claim 18 does not read on an entire hepsin protein or a single amino acid. Claim 18 is specifically drawn to two 9 amino acids-long hepsin peptides having the sequences of SEQ ID NO. 28 or 148.

In view of the above remarks, Applicant submits that the method of claim 18 is fully enabled based on a fair reading of the disclosure presented in this application. Accordingly, Applicant respectfully requests that the rejection of claims 18 and 22 under 35 U.S.C. §112, first paragraph, be withdrawn.

Rejections Under 35 USC §103(a)

Claims 18 and 22 are rejected under 35 USC §103(a) as being unpatentable over **Paglia** et al. (1996) in view of **U.S. Patent No. 6,232,456**. This rejection is respectfully traversed.

Paglia et al. teach priming of an immune response against a major histocompatibility complex class I-restricted antigen by utilizing dendritic cells for presentation of tumor-associated antigens. **Paglia** et al. do not teach a method of using dendritic cells loaded with hepsin peptide SEQ ID NO. 28 or 148 to produce activated T cells directed toward hepsin. The Examiner contends, however, **U.S. Patent No. 6,232,456** teaches a serine protease fragment which is the same as hepsin peptide SEQ ID NO. 28 and 148. Applicant respectfully disagrees.

Applicant submits that **U.S. Patent No. 6,232,456** does not teach the same hepsin peptide as disclosed herein (SEQ ID

NO. 28 or 148). **U.S. Patent No. 6,232,456** only teaches a hepsin peptide which is 17 amino acids long (SEQ ID NO. 67, Figure 3A-2). In contrast, claim 18 is drawn to a 9 amino acids-long hepsin peptide with SEQ ID NO. 28 or 148. Therefore, **U.S. Patent No. 6,232,456** teaches away from the present invention, and **U.S. Patent No. 6,232,456** does not teach or suggest the use of a 9 amino acids-long hepsin peptide with SEQ ID NO. 28 or 148 as disclosed herein.

In view of the above remarks, the combined teaching of **Paglia** et al. and **U.S. Patent No. 6,232,456** only provides a person having ordinary skill in this art with the motivation to use a 17 amino acids-long hepsin peptide. **Paglia** et al. and **U.S. Patent No. 6,232,456** do not provide one of ordinary skill in this art with the motivation to use a 9 amino acids-long hepsin peptide as disclosed herein. Hence, the invention as a whole is not *prima facie* obvious to one of ordinary skill in the art at the time the invention was made. Accordingly, Applicant respectfully requests that the rejection of claims 18 and 22 under 35 U.S.C. §103(a) be withdrawn.

Double Patenting

Claims 18 and 22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14-23 of copending Application No. 10/102,283. Applicant hereby submits a terminal disclaimer to obviate the provisional rejection.

This is intended to be a complete response to the Office Action mailed December 23, 2003. If any issues remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution.

Respectfully submitted,

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Benjamin Aaron Adler, Ph.D., J.D.
Registration No. 35,423
Counsel for Applicant

ADLER & ASSOCIATES
8011 Candle Lane
Houston, Texas 77071
(713) 270-5391 (tel.)
(713) 270-5361 (facs.)
badler1@houston.rr.com